

**REMARKS**

Claims 1-26 were originally filed in the parent application Ser. No. 09/855,925. In a Election/Restriction Requirement under 35 U.S.C. 121, election was required to be made between claims directed to the following patentably distinct species of the claimed invention:

- I. Claims 1-6, drawn to a method for processing seismic data to estimate time shift resulting from velocity anisotropy in the earth's subsurface.
- II. Claims 7 and 18, drawn to a method for processing seismic data with a surface consistent statics computation.
- III. Claims 8-17 and 24-26, drawn to a method and a digital computer programmed for processing seismic data to estimate time shift resulting from velocity anisotropy in the earth's subsurface with a pilot trace.
- IV. Claim 19, drawn to a method for processing seismic data.
- V. Claims 20-23, drawn to a method for processing seismic data to compensate for time shift resulting from azimuthal anisotropy.

In response to the Restriction requirement, Applicant elected to prosecute claims 8-17 and 24-26 from Group III, without traverse, in the parent application. In the present application, Applicant elects to prosecute claims 1-6 from Group I.

Claims 1-6 and 27-37 are pending in the present application. Claim 1 is an independent claim. Claims 1, 2, 5 and 6 have been amended. New claims 27-67 have been added. No new matter has been added by the amendments. Consideration of

Appl. No. 09/855,925  
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Preliminary Amendment

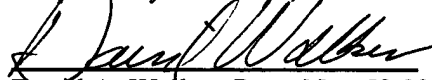
this divisional application is respectfully requested.

Consideration of the application as amended is respectfully requested.

Checks for fees of \$ 1148.00 (\$770.00 for the basic filing fee and \$378.00 for the extra claim fees) are enclosed. Accordingly, no further fee is believed to be due. Please charge any deficiencies, if required, and credit any overpayment for the filing of this amendment to Deposit Account No. 13-0010 (IO-1095D1).

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Respectfully submitted,



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